



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,428	07/05/2005	Toshio Okuyama	2005-1080A	7704
513	7590	06/23/2006	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021				PRAKASAM, RAMYA G
ART UNIT		PAPER NUMBER		
		3651		

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/541,428	OKUYAMA ET AL.
<b>Examiner</b>	<b>Art Unit</b>	
Ramya G. Prakasam	3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 05 July 2005.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-17 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 05 July 2005 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All    b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/27/05, 03/30/06.

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_ .

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters “14” and “16” have both been used to designate elastic bodies. Reference characters “15” and “415” have also both been used to designate inclination plates. It appears that there is a disparity between reference characters used in the “Disclosure of the Invention” and “Best Mode for Carrying Out the Invention”. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. The claims are objected to because, as provided in 37 CFR 1.75(i), where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

6. For example, there are several incidences where there is insufficient antecedent basis for limitations in claims. For example, Claim 1 recites the limitation "the upper surface", where no upper surface was previously defined. There is insufficient antecedent basis for this limitation in the claim. Furthermore, Claim 13 recites the limitation "the flange thereof" where no flange was previously defined. There is insufficient antecedent basis for this limitation in the claim. These are simply examples of the antecedent basis problems with the claims, and revision of all claims is required.

7. Regarding claims 1-17, the phrase "rod-like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

8. Regarding claims 9-10 and 12, the phrase "rubber-like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claim 1-2, 4-6 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kondo (U.S. Patent No. 6,405,895).

Kondo discloses a discharge device for rod-like product one end of which is larger sized, comprising:

- A hopper (82) not only swaying, but also having an opening portion (See Column 19, lines 5-14), at the bottom surface thereof, extending in a direction of a rotation center axis of a swaying motion (See Figure 5); a driving mechanism (See Column 13, lines 24-29) swaying the hopper; and a bottom cover (232,234) closing the opening portion of the swaying hopper so that rod-like products does not escape therefrom, wherein
- The bottom cover has the upper surface (232, 234) closing the opening portion of the hopper profiled so that the rod-like products do not escape from the opening portion of the swaying hopper and a slit extends in a direction perpendicular to a direction of the swaying motion so as to be open on the upper surface, the slit (230) having a width that does not allow the maximum outer size portion of a rod-like product to pass therethrough, but lets almost all the rod-like product to pass therethrough, and
- The driving mechanism (See Column 13, lines 24-29) sways the hopper so that the opening portion of the hopper move along the upper surface of the bottom cover to thereby guide rod-like products accommodated in the hopper into the slit of the bottom cover and to discharge the rod-like products from the slit being arranged in order therein (See Figure 5).

Kondo further discloses a discharge device:

- Wherein the bottom cover is vibrated to discharge the rod-like products guided into the slit (Column 13, lines 1-22)
- Wherein the hopper has a flat bottom plate (162, Figure 2);
- Wherein the hopper has a bottom plate inclined towards the opening portion (162, Figure 2);
- Wherein the hopper has a width of the opening portion narrower than that of whole the hopper (See Figure 2);
- Wherein inclination plates are connected to the opening portion of the hopper so that the end edges of the inclination plates are close to the bottom cover (232,234).

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo in view of Kitamura (U.S. Patent No. 6,334,527).

Kondo discloses all claimed limitations, except for a discharge device

- Wherein the upper surface of the bottom cover takes a profile in conformity with an circular arc so that rod-like products do not escape from the opening portion of the swaying hopper.

- wherein the maximum inclination angle of the hopper is in the range of from 5 to 60 degrees.

Kitamura discloses a discharge device

- wherein the upper surface of the bottom cover takes a profile in conformity with an circular arc (See Figure 17) for the purpose of swinging the hopper in a pendulum fashion (See Column 10, lines 6-18)
- wherein the maximum inclination angle of the hopper is 5 to 60 degrees (See Column 1, lines 46-50) for the purpose of continuously loading products (See Column 1, lines 53-55).

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Kondo utilize a device

- wherein the upper surface of the bottom cover takes a profile in conformity with an circular arc for the purpose of swinging the hopper in a pendulum fashion.
- wherein the maximum inclination angle of the hopper is in the range of from 5 to 60 degrees for the purpose of continuously loading products.

13. Claims 9-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo in view of Laquay (U.S. Patent No. 6,488,449).

Kondo discloses all claimed limitations, except for a discharge device:

- Wherein in the hopper, rubber-like elastic bodies are fixed at the opening portion of the hopper so as to be close to the bottom cover.

- Wherein in the hopper, rubber-like elastic bodies are fixed at the opening portion of the hopper and the rubber-like elastic bodies is defined to have a width in which the end edges thereof get close to the slit when the hopper is inclined.
- Wherein in the hopper, inclinations plates are fixed to the opening portion and elastic bodies are connected to the inclination so that the end edges of the inclination plates get close to the bottom cover using the elastic bodies.

Laquay discloses a discharge device:

- Wherein in the hopper, rubber-like elastic bodies (3) are fixed at the opening portion of the hopper (See Figure 1) for the purpose of suspending articles and creating a longitudinal stop (See Abstract)
- Wherein in the hopper, rubber-like elastic bodies (3) are fixed at the opening portion of the hopper and the rubber-like elastic bodies is defined to have a width in which the end edges thereof get close to the slit when the hopper is inclined (See Figure 1) for the purpose of forming a stop having an abutment forming longitudinal face (See Abstract)
- Wherein in the hopper, inclinations plates (5b) are fixed to the opening portion and elastic bodies (3) are connected to the inclination so that the end edges of the inclination plates get close to the bottom cover using the elastic bodies for the purpose of creating a box that will retain an article (See Column 5, lines 19-32).

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Kondo by utilizing a discharge device:

- Wherein in the hopper, rubber-like elastic bodies are fixed at the opening portion of the hopper for the purpose of suspending articles and creating a longitudinal stop;
- Wherein in the hopper, rubber-like elastic bodies are fixed at the opening portion of the hopper and the rubber-like elastic bodies is defined to have a width in which the end edges thereof get close to the slit when the hopper is inclined for the purpose of forming a stop having an abutment forming longitudinal face;
- Wherein in the hopper, inclinations plates are fixed to the opening portion and elastic bodies are connected to the inclination so that the end edges of the inclination plates get close to the bottom cover using the elastic bodies for the purpose of creating a box that will retain an article.

14. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo in view of Vann (U.S. Patent No. 6,432,719).

Kondo discloses all claimed limitations, except for a discharge device comprising:

- A removal arm catching and pulling off a pipet tip, by the flange thereof, moved in a piled-up state (See Figure 12), wherein rod-like products are pipet tips.
- Not only the removal arm so as to be inclined relative to a fixing position not swaying together with the hopper, but also an inclination mechanism for inclining the removal arm constituted of permanent magnets fixed on the hopper and the removal arm at respective opposite portions thereof.
- Wherein the bottom cover is defined to form an upward inclined slit catching the flange of an pipet tip, wherein the upward inclined slit is not only inclined at an upward gradient in a moving direction of the pipet tips, but the fore end of the

removal arm is also provided to the upward inclined slit, thereby removing the piled-up pipet tip moved along the upward inclined slit.

- Wherein the upward inclined slit is defined to form a clearance through which the flange of a rod-like product at the lowest level passes between the fore end of the upward inclined slit and the bottom cover, the clearance being narrower than twice a thickness of the flange of a rod-like product.

Vann discloses a discharge device comprising:

- A removal arm catching and pulling off a pipet tip, by the flange thereof, moved in a piled-up state wherein rod-like products are pipet tips (See Figure 5B and 6B and Abstract) for the purpose of providing a gate mechanism to create a container outlet region (See Column 10, lines 40-44).
- Not only the removal arm so as to be inclined relative to a fixing position not swaying together with the hopper, but also an inclination mechanism for inclining the removal arm constituted of permanent magnets fixed on the hopper and the removal arm at respective opposite portions thereof (See Column 10, lines 40-67) for the purpose of creating an outlet region that is constricted such that articles are not able to fall out (See Column 11, lines 14-20).
- Wherein the bottom cover is defined to form an upward inclined slit catching the flange of an pipet tip (170), wherein the upward inclined slit is not only inclined at an upward gradient in a moving direction of the pipet tips, but the fore end of the removal arm is also provided to the upward inclined slit, thereby removing the piled-up pipet tip moved along the upward inclined slit (See Figures 5A and 6A) for the

purpose of allowing the article to be held in place until such time as the article is needed (See Column 10, lines 31-37).

- Wherein the upward inclined slit is defined to form a clearance through which the flange of a rod-like product at the lowest level passes between the fore end of the upward inclined slit (178 and 180) and the bottom cover, the clearance (170a) being narrower than twice a thickness of the flange of a rod-like product (See Figure 5A and 6A) for the purpose of allowing the article to be held in place until such time as the article is needed (See Column 10, lines 31-37).

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Kondo by utilizing a discharge device:

- A removal arm catching and pulling off a pipet tip, by the flange thereof, moved in a piled-up state wherein rod-like products are pipet tips for the purpose of providing a gate mechanism to create a container outlet region.
- Not only the removal arm so as to be inclined relative to a fixing position not swaying together with the hopper, but also an inclination mechanism for inclining the removal arm constituted of permanent magnets fixed on the hopper and the removal arm at respective opposite portions thereof for the purpose of creating an outlet region that is constricted such that articles are not able to fall out.
- Wherein the bottom cover is defined to form an upward inclined slit catching the flange of an pipet tip, wherein the upward inclined slit is not only inclined at an upward gradient in a moving direction of the pipet tips, but the fore end of the removal arm is also provided to the upward inclined slit, thereby removing the piled-

up pipet tip moved along the upward inclined slit for the purpose of allowing the article to be held in place until such time as the article is needed.

- Wherein the upward inclined slit is defined to form a clearance through which the flange of a rod-like product at the lowest level passes between the fore end of the upward inclined slit and the bottom cover, the clearance being narrower than twice a thickness of the flange of a rod-like product for the purpose of allowing the article to be held in place until such time as the article is needed.

***Conclusion***

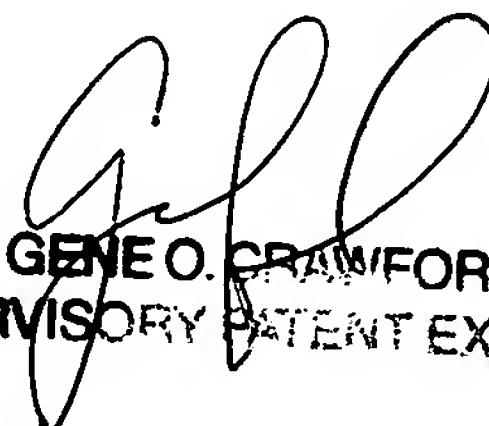
15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramya G. Prakasam whose telephone number is (571) 272-6011. The examiner can normally be reached on Monday - Friday, 9:30am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

06/20/2006  
RGP



GENE O. CRAWFORD  
SUPERVISORY PATENT EXAMINER